

REMARKS

Claims 1, 5-7, 9-22 are pending. Claims 11-22 are new. Claims 2-4 and 8 are canceled.

Applicants have not dedicated or abandoned any unclaimed subject matter and moreover has not acquiesced to any rejections and/or objections made by the Patent Office. Applicants reserve the right to pursue prosecution of any presently excluded claim embodiments in future continuation and/or divisional applications.

Claim rejections - 35 USC 102

Fodor

Claims 1-5 and 7-9 are rejected under 35 USC 102(b) as allegedly being anticipated by US Patent 5,324,643 to Fodor et al. Claims 2-4 and 8 have been canceled, obviating their rejection.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." MPEP 2131 (quoting *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628 (Fed. Cir. 1987)).

Claim 1 has been amended to recite a first, second and third port. Fodor does not disclose a third port and therefore does not anticipate claim 1 or dependent claims 5.

Claim 7 has been amended to recite a pump configured to mix and pressurize a fluid sample. *Fodor* teaches away from such a pump. For example, *Fodor* in column 5, lines 64-66 teaches that "[a]ll operations herein are preferably performed at constant and substantially atmospheric pressure[.]" *Fodor* therefore does not anticipate claim 7 or dependent claim 9.

Fodor does not anticipate the claims as amended, and Applicants request withdrawal of the rejection.

Schembri

Claims 1-10 has been rejected under 35 USC 102(a) or (e) as allegedly being anticipated by US Patent 6,258,593 to Schembri et al. Claims 2-4 and 8 have been canceled, obviating their rejection.

For 35 USC 102(a) to apply, the reference must have a publication date earlier in time than the effective filing date of the application. MPEP 706.02(a)(II)(C). The earliest

publication date of *Schembri* is July 10, 2001. The effective filing date of the instant application is December 9, 1999. *Schembri* therefore is inapplicable as a reference under 35 USC 102(a).

Schembri does not anticipate the present claims under 35 USC 102(e). The Examiner states with respect to claim 1 that "[t]he apparatus includes a base plate (3) and a gasket (8) affixed between the biochip and the base plate[.]" The gasket however is part 4 in Figure 1. The gasket in *Schembri* fits between a cover (3) and a housing (5) according to Figure 1 and column 10, lines 64-66, and does not define a reaction chamber. What the Examiner refers to as part 8 is actually a lip. Fig. 2 & col. 11, lines 11-13. *Schembri* therefore does not anticipate claims 1 or dependent claims 5-6.

Claim 7 has been amended to recite a pump configured to mix and pressurize a fluid sample in at least one reaction chamber. The specification on page 6, lines 8-10, states that pressurizing the fluid sample results in dissolution of gas bubbles. *Schembri* does not disclose any pump; in fact, *Schembri* teaches away from use of such pump since it is directed toward utilizing bubbles to effect mixing. See, e.g., *Schrembri*, col. 3, lines 52-67 and col. 5, lines 19-20. *Schembri* thus does not anticipate amended claim 7 and claims 9 and 10 dependent therefrom.

Schembri does not anticipate the instant claims as amended, and Applicants request that the Examiner withdraw the rejection.

Claim rejections - 35 USC 103

Claims 6 and 10 are rejected under 35 USC 103(a) as allegedly being unpatentable over *Fodor* in view of US Patent 5,578,832 to Trulson et al.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must not be based on applicant's disclosure. See MPEP 2142 (citing *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991)). Although the Supreme Court recently affirmed the obviousness analysis that it had set forth in *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966), the Court

also stated that “[t]here is no necessary inconsistency between the idea underlying the TSM [i.e., teaching-suggestion-motivation] test and the *Graham* analysis.” *KSR Int’l Co. v. Teleflex Inc.*, No. 04-1350, slip op. at 13 (2007). Thus, the Supreme Court has not invalidated the TSM test, but rather only rejected its “rigid” application. *See id.* at 11. In any case, an obviousness rejection continues to require an explicit analysis providing some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *See id.* at 14 (citing *In re Kahn*, 411 F.3d 977, 988 (Fed. Cir. 2006)).

Claim 1 has been amended to recite a third port and claims 1 and 7 have been amended to recite a pump configured to mix and pressurize a fluid sample. Neither *Fodor* nor *Trulson* teaches a third port. Furthermore, neither *Fodor* nor *Trulson* discloses the claimed pump. *Fodor* and *Trulson*, alone or in combination, therefore do not teach all of the limitations of claims 6 or 10, depending from claims 1 and 7 respectively.

A *prima facie* case of obviousness may also be rebutted by showing that the art, in any material respect, teaches away from the claimed invention. MPEP 2144.05(III) (citing *In re Geisler*, 116 F.3d 1465 (Fed. Cir. 1997)); *see also KSR Int’l Co.* at 12, (citing with approval *United States v. Adams*, 383 U.S. 39, 51-52 (1966) (“The Court relied upon the corollary principle that when the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be nonobvious.”)). Both claims 1 and claim 7 have been amended to recite a pump configured to mix and pressurize a fluid sample. As discussed above, *Fodor* teaches away from the claimed pump and hence teaches away from the subject matter of claims 6 and 10.

Because *Fodor* and *Trulson* alone or in combination do not teach all of the limitations of claim 6 or 10, and *Fodor* teaches away from claims 6 and 10, the Examiner has not established a *prima facie* case of obviousness. Applicants request withdrawal of the objection.

Double Patenting

Claims 1-10 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-17, 19-30 and 33-66 of US Patent 6,642,046 to McGarry et al. The Examiner states that the claims of the ‘046 Patent anticipate the instant claims 1-10. Claims 2-4 and 8 have been canceled, obviating their rejection.

Claim 1 has been amended to recite a third port. Claim 7 has been amended to recite a pump configured to mix and pressurize a fluid sample. Claims 1-17, 19-30 and 33-66 of the '046 Patent do not recite either a third port or a pump configured to mix and pressurize a fluid sample. The claims of the '046 Patent therefore do not anticipate the instant claims. Given that the instant claims are patentably distinct from the '046 Patent, Applicants request that the Examiner withdraw the rejection.

CONCLUSION

Applicant believes that all claims now pending in this application are in condition for allowance. Early notification thereof is respectfully requested. If the Examiner has any questions, the Examiner is invited to call the undersigned at 415.442.1379. The Commissioner is authorized to charge any additional fees that may be required or to credit any overpayment to Deposit Account No. 50-0310 (Docket No. 067461-5052-US01).

Respectfully submitted,

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